

AMENDMENTS TO THE CLAIMS

1. (currently amended) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:

said substrate has top and bottom surfaces;

said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate with a matrix material; and

said carrier is non-magnetically affixed to said bottom substrate surface, wherein said carrier comprises at least one of synthetic plastic or ceramic.

2. (original) The conditioning disk of claim 1 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

3. (original) The conditioning disk of claim 1 wherein said matrix material comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

4. (original) The conditioning disk of claim 1 further comprising a corrosion resistant powder.

5. (original) The conditioning disk of claim 1 wherein said substrate is formed of said matrix material.

6. (original) The conditioning disk of claim 1 wherein said substrate is more flexible than said carrier.

7. (original) The conditioning disk of claim 1 wherein said carrier is affixed to said substrate with an adhesive.

8. (original) The conditioning disk of claim 1 wherein said abrasive particles are arranged in a predetermined pattern.

9. (original) The conditioning disk of claim 1 wherein said matrix material comprises a brazing alloy.

10. (original) The conditioning disk of claim 9 wherein said abrasive particles are diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

11. (original) The conditioning disk of claim 9 wherein said abrasive particles are cubic boron nitride and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

12. (original) The conditioning disk of claim 9 wherein said abrasive particles are aluminum oxide and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

13. (withdrawn) A conditioning disk comprising:
a substrate having top and bottom surfaces;
a plurality of abrasive particles arranged on at least a portion of said top substrate surface, said abrasive particles affixed to said substrate with a matrix material; and
a polycarbonate carrier affixed to said bottom substrate surface.

14. (withdrawn) The conditioning disk of claim 13 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

15. (withdrawn) The conditioning disk of claim 13 wherein said matrix material comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

16. (withdrawn) The conditioning disk of claim 13 further comprising a corrosion resistant powder.

17. (withdrawn) The conditioning disk of claim 13 wherein said carrier is affixed to said substrate with an adhesive.

18. (withdrawn) The conditioning disk of claim 13 wherein said abrasive particles are arranged in a predetermined pattern.

19. (withdrawn) The conditioning disk of claim 13 wherein said matrix material comprises a brazing alloy.

20. (withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

21. (withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are cubic boron nitride and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

22. (withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are aluminum oxide and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

23. (currently amended) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:

said substrate has top and bottom surfaces;

said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate with an electroplated metal; and

said carrier is non-magnetically affixed to said bottom substrate surface, wherein said carrier comprises at least one of synthetic plastic or ceramic.

24. (withdrawn) The conditioning disk of claim 23 wherein said carrier comprises polycarbonate.

25. (original) The conditioning disk of claim 23 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

26. (original) The conditioning disk of claim 23 wherein said electroplated metal comprises nickel.

27. (original) The conditioning disk of claim 26 wherein said abrasive particles are diamond.

28. (original) The conditioning disk of claim 23 wherein said substrate is formed of said electroplated metal.

29. (original) The conditioning disk of claim 23 wherein said carrier is affixed to said substrate with an adhesive.

30. (original) The conditioning disk of claim 23 wherein said abrasive particles are arranged in a predetermined pattern.

31. (new) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:

said substrate has top and bottom surfaces;

said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate with a matrix material; and

said carrier is permanently affixed to said bottom substrate surface, wherein said carrier comprises at least one of synthetic plastic or ceramic.

32. (new) The conditioning disk of claim 32, wherein said carrier is affixed to said bottom surface by an adhesive or mechanical fastener.